

REMARKS

INTRODUCTION

In accordance with the foregoing, claims 1, 2, 8, 9, 14, 15, 20, 21, 22, 26, 27 and 30 have been amended. Claims 7, 19, 25, 28 and 31 have been cancelled. Claims 1-6, 8-18, 20-24, 26, 27, 29, 30 and 32 are pending and under consideration.

CLAIM REJECTIONS

Claims 1, 2, 5, 10-15, 18, 22, 27 and 30 were rejected under 35 USC 102(b) as being anticipated by Takehiro (JP 2002-083434) (hereinafter "Takehiro").

Claims 3, 4, 6-9, 16, 17, 19-21, 23-26, 28, 29, 31 and 32 were rejected under 35 USC 103(a) as being unpatentable over Takehiro in view of Kikuchi et al. (US 6,570,828) (hereinafter "Kikuchi").

Takehiro discusses an optical pickup device. The optical pickup device of Takehiro includes four suspension members 116-119. Suspension member 116 includes a first metal section 116a, an insulating material section 116b and a second metal section 116c. Similar to suspension member 116, suspension member 117 includes a first metal section 117a, an insulating material section 117b and a second metal section 117c. Suspension members 118 and 119 consist of one metal layer. Takehiro, paragraph [0043] and Figure 10.

Kikuchi discusses an optical pickup device having a movable-side member driven with a predetermined inclination. In Kikuchi, four spring wires 52 serving as suspensions for supporting the holder 33 in the biaxial actuator 51 increase diameters of upper and lower spring wires 52a, 52a on the inner peripheral side of the optical disk and decrease diameters of upper and lower spring wires 52b, 52b on the outer peripheral side of the optical disk. The four spring wires 52 are formed of beryllium copper thin plates having elasticity, and a relationship between a width w of the spring wires 52a, 52a of the inner peripheral side and a width w' of the spring wires 52b, 52b of the outer peripheral side is set to $w > w'$ and spring constants of the spring wires 52a, 52a of the inner peripheral side are set to be larger than those of the spring wires 52b, 52b of the outer peripheral side. Respective base end portions of the four spring wires 52 (52a, 52a and 52b, 52b) are formed on the same diaphragm spring portion 52c. Kikuchi, 8:42-8:58 and Figures 1 and 2.

Claims 1-21

Amended independent claims 1 and 14 recite, in part, a plurality of elastic members, each having one end coupled to the holder and another end coupled to the moving member such that the movable member is supported movably, the length of the elastic member positioned nearer an inner circumference of the optical recording media with respect to the radius direction of the optical recording medium being different from that of the elastic member positioned nearer an outer circumference of the optical recording medium such that the movable member asymmetrically moves in a focusing direction of the optical recording media. Support for these amendments may be found in at least original claims 7 and 19, respectively. In contrast to claims 1 and 14, as stated in the Office Action, Takehiro does not discuss that the elastic members have differing lengths. In Takehiro, the suspension members 116-119 are all the same length, and in further contrast to claims 1 and 14, the suspension members 116 and 117 on either side of the objective lens appear to be identical.

This deficiency in Takehiro is not cured by Kikuchi. In Kikuchi, the four spring wires 52 (corresponding to the elastic members of claim 1) are formed of beryllium copper thin plates having elasticity, and the width of the spring wires 52a, 52a of the inner peripheral side is greater than the width of the spring wires 52b, 52b of the outer peripheral side. Further, Kikuchi discuss that the spring constants of the spring wires 52a, 52a of the inner peripheral side are set to be larger than those of the spring wires 52b, 52b of the outer peripheral side. However, in contrast to claims 1 and 14, Kikuchi does not discuss that there is any difference in the length of spring wire 52a versus 52b.

The Examiner relies on the discussion in Kikuchi at 5:61-6:8 relating to increasing an amount of damping materials of the supporting springs located at the inner peripheral side relative to the disk-like optical recording medium than that of damping materials of the supporting springs located at the outer peripheral side to supply this feature of claims 1 and 14. It is respectfully submitted that larger or smaller damping materials do not relate to the length of the supporting springs and, as such, claims 1 and 14 patentably distinguishes over Takehiro and Kikuchi.

This technical feature of claims 1 and 14 allows the defective rate of the actuator to be reduced and a jitter characteristic to be improved in the optical pickup, thereby increasing the productivity of the optical pickup.

Claims 7 and 19 have been cancelled. Claims 2-6, 8-13, 15-18, 20 and 21 depend on claims 1 and 14, respectively, and are therefore believed to be allowable for at least the foregoing reasons.

Withdrawal of the foregoing rejection is requested.

Claims 22-26

Amended independent claim 22 recites: "...wherein the different property is a different length of the second elastic member positioned nearer the outer circumference with respect to the radius direction of the optical recording media, from that of the first elastic member positioned nearer an outer circumference of the optical recording media." Support for this amendment may be found in at least original claim 25. In contrast to claim 22, as stated in the Office Action, Takehiro does not discuss that the elastic members have differing lengths. In Takehiro, the suspension members 116-119 are all the same length.

This deficiency in Takehiro is not cured by Kikuchi. In Kikuchi, the four spring wires 52 (corresponding to the elastic members of claim 1) are formed of beryllium copper thin plates having elasticity, and the width of the spring wires 52a, 52a of the inner peripheral side is greater than the width of the spring wires 52b, 52b of the outer peripheral side. Further, Kikuchi discuss that the spring constants of the spring wires 52a, 52a of the inner peripheral side are set to be larger than those of the spring wires 52b, 52b of the outer peripheral side. However, in contrast to claim 22, Kikuchi does not discuss that there is any difference in the length of spring wire 52a versus 52b.

This technical feature of claim 22 allows the defective rate of the actuator to be reduced and a jitter characteristic to be improved in the optical pickup, thereby increasing the productivity of the optical pickup.

Claim 25 has been cancelled. Claims 23, 24 and 26 depend on claim 22, and are therefore believed to be allowable for at least the foregoing reasons.

Withdrawal of the foregoing rejection is requested.

Claims 27-29

Amended independent claims 27 recites: "...wherein at least one of thickness, length, and stiffness of the first elastic member is different than that of the second elastic member." Support for this amendment may be found in at least original claim 28. In contrast to claim 27 neither Takehiro nor Kikuchi discuss that the first and second elastic members have different

lengths. In Takehiro, the suspension members 116-119 are all the same length. Kikuchi does not cure this deficiency in Takehiro, as Kikuchi does not discuss that there is any difference in the length of spring wire 52a versus 52b.

Claim 28 has been cancelled. Claim 29 depends on claims 27 and is therefore believed to be allowable for at least the foregoing reasons.

Withdrawal of the foregoing rejection is requested.

Claims 30-32

Amended independent claim 30 recites: "...wherein the difference between the first and the second elastic member is at least one of material, length, stiffness and thickness." Support for this amendment may be found in at least original claim 31. In contrast to claim 30 neither Takehiro nor Kikuchi discuss that the difference between the first and second elastic members is their length. In Takehiro, the suspension members 116-119 are all the same length. Kikuchi does not cure this deficiency in Takehiro, as Kikuchi does not discuss that there is any difference in the length of spring wire 52a versus 52b.

Claim 31 has been cancelled. Claim 32 depends on claims 30 and is therefore believed to be allowable for at least the foregoing reasons.

Withdrawal of the foregoing rejection is requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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